**Station 1:**

1. Create a double bubble thinking map over erosion and weathering. It should include three characteristics for each and three characteristics for both. There will be a total of 14 bubbles.
2. Create a tree map over the types of weathering, include the following terms: mechanical weathering, chemical weathering, ice, abrasion, wind, water, gravity, plants, animals, acid precipitation, air and temperature.

**Station 2:**

PICTURE ID. Identify if the picture is showing weathering or erosion. Then, identify what type of weathering or erosion it is.

**(use the power point on the smartboard for pictures)**

Station 3:

**Sugar Cubes: Which type of weathering is it?**

MATERIALS:

Sugar cubes- 3 per group,

3 clear and clean containers with lids for each group

Stop watch

1 beaker of water with eyedropper

Jar with Step # Identification Cards

Paper towel for cleanup

1. Place a sugar cube in the bottom of all containers.
2. Container one should have a whole sugar cube, you will need the timer. As soon as you are sure you can operate the timer you are ready to begin.
3. Start the timer.
4. Add 5 drops of water on the top of the sugar cube.
5. Make observations on your student answer sheet.
6. What might happen if you added more water ?
7. What is the water technically doing ?
8. What type of weathering does this represent ?
9. Keep track of what is in each jar.
10. Container two with lid in place with sugar cube inside. Shake the covered container with the cube for 15 seconds. (NO WATER) Make observations on your student answer sheet.
11. What type of weathering does this show?
12. Compared to jar one, which one had the greatest amount of weathering?
13. Container three with lid: sugar cube plus 5 drops of water, seal the lid and shake for 15 seconds. Make observations and record them on your student answer sheet.
14. What type of weathering does this show?
15. Compared to jar one and two, which one had the greatest amount of weathering?
16. Clean up your materials and return them to the given location.
17. Put your materials back at the station.

Station 4: Make tree maps

Make a tree map on deposition and then make a tree map about erosion.

How are they similar?

How are they different?

Station 5: Layers of Soil

Fill in the following bridge maps for the layers of soil

Pudding oreos crushed m&ms

\_\_\_\_\_\_\_\_\_/\\_\_\_\_\_\_\_\_\_\_/\\_\_\_\_\_\_\_\_\_\_/\\_\_\_\_\_\_\_\_\_/\\_\_\_\_\_\_\_\_

Organic material topsoil bedrock

Make a labeled diagram on your sheet for each horizon of soil. Describe each layer in detail.

Station 6: Deposition

Explain each of the following in your own words:

Delta

Alluvial Fan

Sand dune

Beach

Barrier Spit

Till Deposit

Station 7: Computers

The computer will (hopefully) be logged onto the textbook website. Click on the different links to learn about weathering, erosion, and deposition.

Make sure you complete the Virtual Investigation of ‘Weather and Soil Formation’

Username: period1214

Password: period12